

CLAIMS:

- 1) A wireless client device for use in an Internet Protocol (IP) compatible communications network, said client device (MT) being adapted to communicate with said network in accordance with one of a plurality of communications standards (BT, IEEE802.11, GPRS) and to make a selection for connection to said
5 network from among a plurality of network interfaces (AP₁₋₃), said device (MT) being arranged in use to make a said selection automatically and according to a predetermined network interface selection policy (NISP) implemented in said client device.
- 2) A client device according to claim 1, wherein a said network interface
10 selection policy (NISP) is selected for implementation by user intervention or by said client device (MT) itself from among a predefined set of said selection policies stored therein.
- 3) A client device (MT) according to claim 1 or claim 2, wherein a said
15 network interface selection policy (NISP) includes a consideration of at least one of location or context awareness, preferably including a mobility parameter indicative of whether a said location or context is dynamic or static and/or an indication of how such information has been gathered.
- 4) A client device according to any preceding claim, wherein said client
20 device (MT) is adapted to change automatically between network interface selection policies (NISP) under predetermined circumstances, authority to make a said change preferably being provided by a user and/or preferably being notified to a user.

- 5) A client device according to any preceding claim, wherein said client device (MT) is adapted to test for the availability of one or more of said network interfaces (AP_{1-3}), preferably by periodically performing a scan of available interfaces.
- 5 6) A client device according to any preceding claim, wherein said client device (MT) is adapted to pre-connect to a said interface (AP_{1-3}) selected by a said network interface selection policy (NISP), so as to test the availability of said interface in advance of performing a handover thereto from a currently connected interface (AP_{1-3}).
- 10 7) A client device according to any preceding claim, wherein said network interfaces are controlled by a multi-standard enabled wireless adaptation layer (M-WAL) implemented in an operating system of said client device (MT).
- 8) A client device according to any preceding claim, wherein a plurality of said interfaces (AP_{1-3}) are assigned a priority for implementation in a said network interface selection policy (NISP), a said priority preferably being changeable in said client device (MT) and more preferably being dynamically changeable to reflect current status of said interface.
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- 9) A client device according to any preceding claim, wherein said client device (MT) stores information relating to access points (AP_{1-3}) currently available and/or previously visited.
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- 10) A client device according to any preceding claim, wherein said client device (MT) is adapted to monitor network interface (AP_{1-3}) availability substantially continuously and preferably keeps updated a stored list of available said interfaces.

- 11) A client device according to any preceding claim, wherein a switch
between said interfaces (AP₁₋₃) is performed by said client device (MT) in the event
that a stronger or higher priority interface becomes available or in the event that a
5 connection to a network (BT, IEEE802.11, GPRS) that uses a current said interface
(AP₁₋₃) is lost.
- 12) A client device according to any preceding claim, wherein said client
device (MT) is adapted to check, at least periodically, the availability of one or more
access points (AP₁₋₃) neighboring a currently connected access point (AP₁₋₃).
- 10 13) A client device according to any preceding claim, wherein a said network
interface selection policy (NISP) includes consideration of at least one of usage cost,
bandwidth availability, received signal strength, link quality, link availability,
signal-to-noise ratio, power consumption or user intervention.
- 14) A client device according to any preceding claim, wherein a said
15 communications standard comprises one of Ethernet, IEEE802.11a, IEEE802.11b,
BluetoothTM, GPRS, and GSM.
- 15) A method of performing communication in an Internet Protocol (IP)
compatible network, the method including:
a) connecting a client device (MT) to said network in accordance with one of a
20 plurality of communications standards (BT, IEEE802.11, GPRS); and
b) changing automatically between said communications standards under
predetermined circumstances defined in a network interface selection policy (NISP)
implemented in said client device.
- 16) A computer program product for executing a method according to claim
25 15 when executed on a computing device.

- 17) A data carrier having the computer program product of claim 16 encoded thereon as an executable program.